

Appl. No. 09/677,058
Amdt. dated November 19, 2003
Reply to Office Action of November 18, 2002

REMARKS

Applicant would like to thank Examiner Lee S. Lum for conducting a telephone interview on February 4, 2003 with the Applicants' attorneys L. Craig Metcalf (Reg. No. 31,398) and Robert S. Rapp (Reg. No 45,393). At that time, the outstanding office action and cited references were discussed. In particular, the U.S. Patent No. 5,499,842 to Yamamoto ("Yamamoto"), U.S. Patent No. 5,685,560 to Sugiyama ("Sugiyama") and U.S. Patent No. 5,863,064 to Rheinlander ("Rheinlander"). In the interview, the Applicant identified differences between the claimed invention and the cited references. The Applicant indicated that it would modify the claims to more clearly express the distinguishing characteristics of this invention.

Claims 1, 3-14, 16-18, 20-21, 23-24, and 27-34 are pending in the above-referenced application. The Examiner rejected claims 5-8 and 32 under 35 U.S.C. §112, second paragraph. The Examiner rejected claims 1, 3-14, 16-18, 20-21, 23-24, and 27-34 under 35 U.S.C. §103(a) as being unpatentable over Yamamoto in view of Sugiyama and Rheinlander.

By this paper, claim 31 has been cancelled and claims 1, 16, 21, 24, and 30 have been amended. In view of these amendments and the following remarks, reconsideration and allowance of claims 1, 3-14, 16-18, 20-21, 23-24, 27-30, and 32-34 is respectfully requested.

REJECTION OF CLAIMS UNDER 35 U.S.C. §112, SECOND PARAGRAPH

The Examiner rejected claims 5-8, and 32 under 35 U.S.C. §112, second paragraph, as being indefinite. With respect to claims 5 and 32 and claims 6 and 7, which depend from claim 5, it is

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asserted that the phrase "'nonlinear portion further comprises a first linear segment' appears to be contradictory because 'nonlinear' should not comprise a 'linear' portion." Office Action, p. 2.

As shown in Figures 1, 3, 4, and 6, the nonlinear portion may include linear segments and still inhibit the visibility of the seam. As explained in connection with Figure 3, the "linear segments 42 are short enough to inhibit folding of the outer layer 30 into the seam 20." Page 14, lines 5-6. Thus, the nonlinear portion is a portion of the seam that is nonlinear *on the whole* and may include short segments that are linear.

As to claim 8, it is asserted that the phrase "'each pair comprising two bends oriented in the same direction' is unclear because this description forms a complete closed circle or similar shape." Office Action, p. 2.

With reference to Figure 4, the phrase "two bends oriented in the same direction" refers to a pair of bends both oriented in a clockwise direction or a counterclockwise direction when one travels from a first end 22 to a second end 23 of the seam. Page 14, lines 11-13. As shown in Figure 4, the bends are of a sufficiently small angle that a closed or bounded shape is not formed.

Accordingly, Applicant respectfully requests withdrawal of the rejections under 35 U.S.C. §112, second paragraph.

REJECTION OF CLAIMS 1, 3-14, 16-18, 20, 21, 23, 24, and 27-34 UNDER 35 U.S.C. 103(a)
OVER YAMAMOTO, SUGIYAMA, AND RHEINLANDER

The Examiner rejected claims 1, 3-14, 16-18, 20, 21, 23, 24, and 27-34 under 35 U.S.C. §103(a) based on Yamamoto combined with Sugiyama, and Rheinlander. The Examiner

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acknowledges that neither Yamamoto nor Sugiyama disclose an outer layer affixed to the exterior side of the face.

It is well settled that the PTO has the burden to establish a *prima facie* case of obviousness. *In re Glaug*, 2002 U.S. App. Lexis 4246, *4 (Fed. Cir. March 15, 2002); *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992); *In re Fine*, 837 F.2d, 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988); MPEP § 2142. To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Dow Chemical*, 5 USPQ2d 1529, 1531 (Fed. Cir. 1988); *see also* MPEP § 2143.03.

The Cited Prior Art Fails to Disclose an Outer Layer as Claimed in the Present Application

Claims 1, 16, 21, 24, and 30 have been amended to include the following limitation:

wherein the outer layer is formed from a material that is sufficiently stiff to resist form-fitting the seam such that a cavity is interposed between the seam and the outer layer, and the outer layer is devoid of visible indicia of the seam.

As explained in the specification, the material of the outer layer 30 is sufficiently stiff to resist form-fitting the nonlinear seam 20. Page 12, lines 5-10. A cavity is thus formed between the seam 20 and outer layer 30. Page 12, lines 21-23. As a result, the outer layer 30 is devoid of visible indicia of the seam 20, or indentations corresponding to the underlying seam 20. The appearance of the interior of the vehicle is thus enhanced.

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In Rheinlander, only a coat 100 of paint shields the tear seam 30 from view. This coat 100 of paint is not sufficiently stiff to avoid indentation and revelation of the underlying seam 30. Col. 9, lines 7-11, col. 11, lines 62-67; and Fig. 2. The coat 100 only serves to prevent direct viewing of the seam 30. In addition, the coat 100 of paint is attached to the seam 30, i.e., no cavity is interposed between the seam 30 and coat 100 of paint. Indentations created by the seam 30 will clearly be manifest through the coat 100 of paint. As a result, Rheinlander exemplifies the problem remedied by the present invention.

Thus, the cited prior art references fail to teach the limitations of amended claims 1, 16, 21, 24, and 30. The remaining pending claims are allowable as being dependent from allowable base claims. Accordingly, Applicant respectfully requests withdrawal of these rejections under 35 U.S.C. §103(a).

Objective or Secondary Considerations of Nonobviousness Show that the Amended Claims are Allowable

Objective considerations of nonobviousness, such as a long-felt need and skepticism of those skilled in the art, are highly relevant to a determination of obviousness. *See, e.g., Graham v. John Deere*, 148 USPQ 459 (1966) and MPEP §§ 716.04 and 716.05. In fact, the Federal Circuit has observed:

Indeed, the evidence of secondary considerations may often be the *most probative and cogent evidence* in the record. It may often establish that an invention appearing to have been obvious in light of the prior art was not. It is to be considered as part of

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all evidence, not just when the decision maker remains in doubt after reviewing the art.

Stratoflex, Inc. v. Aeroquip. Corp., 218 U.S.P.Q. 871, 879 (Fed. Cir. 1983). Even at the examination stage, the secondary factors must be considered. *See, e.g., In re Sernaker*, 217 U.S.P.Q. 1, 7 (Fed. Cir. 1983) ("If . . . a patent application properly presents evidence relating to the secondary considerations, the Board must always consider such evidence in connection with the determination of obviousness.")

In this case, there has been a long-felt and persistent need for the invention claimed in the present application, as shown in the attached declaration of Edward Friery ("Declaration"). For at least seven and a half years, the need to prevent or limit the visibility of tear seam for an airbag has been recognized in the industry. Declaration, ¶ 6. This problem is frequently referred to in the industry as the seam "read-through" problem. Declaration, ¶ 3. Mr. Friery, one of the co-inventors of the invention disclosed in the present application, was hired more than seven and half years ago by a predecessor of Autoliv ASP, Inc. ("Autoliv"), the assignee of this Application, to resolve this and other problems related to airbag covers. Declaration, ¶ 6. Mr. Friery has worked on this problem for more than five years. Declaration, ¶ 6. In addition, Mr. Friery continues to receive calls from other employees of Autoliv and its foreign affiliates who seek a resolution to this problem. Declaration, ¶

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13. Thus, there is a persistent and long-felt need to successfully resolve the seam-read through problem.

Other solutions have been proposed, but none have provided a satisfactory resolution of this problem. For instance, placing a styling line over the seam has been proposed. Declaration, ¶ 7. However, just like the indentation created by the seam, this styling line disrupts the style scheme of the interior of the vehicle. Declaration, ¶ 7. This proposed solution thus perpetuates, but does not resolve the problem. Declaration, ¶ 7.

The invention of the present Application resolves the seam read-through problem. Testing has shown that the use of a quality outer layer that is sufficiently stiff with an underlying nonlinear seam eliminates the seam read-through problem. Declaration, ¶¶ 8, 11. Using the present invention, only by pressing the outer layer with a great deal of force is a portion of the seam visible. Declaration, ¶ 11. Furthermore, the seam is no longer visible when the outer layer returns to its normal position. Declaration, ¶ 11.

In addition, the present invention was greeted with skepticism by those skilled in the art. "Expressions of disbelief by experts constitute strong evidence of nonobviousness." *Environmental*

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Designs, Ltd. v. Union Oil Co. of Cal. 281 U.S.P.Q. 865, 869 (Fed. Cir. 1983); *see also* MPEP § 716.05.

Linear seams are the standard in the industry. Those in the industry believed that, during deployment, a cover with a nonlinear seam would tear outside the seam such that the inflatable cushion would deploy in an unpredictable manner, not providing proper protection to the occupant. Declaration, ¶ 10. Even Mr. Friery's supervisor at the time, who was a highly experienced and very capable engineer, believed that this would be the case. Declaration, ¶ 10. However, testing has shown that this is not so. Declaration, ¶ 10. The present invention both conceals the tear seam and does not interfere with proper deployment of the inflatable cushion. Declaration, ¶¶ 10, 11.

Accordingly, the objective considerations provide strong evidence that the present invention is not obvious, but, in fact, runs contrary to conventional teachings in the field and satisfies a long-felt need in the industry.

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THE INDUSTRY TEACHES AWAY FROM USE OF A NON-LINEAR TEAR SEAM

Teaching away from an applicant's invention demonstrates a lack of prima facie obviousness. *McGinley v. Franklin Sports*, 60 USPQ2d 1001, 1008 (Fed. Cir. 2001); *In re Fine*, 837 F.2d, 1071, 5 USPQ2d 1596 (Fed. Cir. 1988). In particular, teaching "in a direction divergent from the path that was taken by the applicant" demonstrates nonobviousness. *Tec Air, Inc. v. Denso Mfg. Mich. Inc.*, 52 USPQ2d 1294, 1298 (Fed. Cir. 1999).


As explained above, the teachings in the art led away from the present application. It was widely believed in the industry that a nonlinear seam would permit cover to tear outside the seam, leading to unpredictable cushion positioning during deployment. Declaration, ¶ 10. Thus, the industry taught away from the Applicant's invention, which further demonstrates nonobviousness.

CONCLUSION

In view of the foregoing, Applicant submits that claims 1, 3-14, 16-18, 20-21, 23-24, 27-30, and 32-34 are in a condition for allowance. If there are any remaining issues preventing allowance of the pending claims that may be clarified by telephone, the Examiner is requested to call the undersigned.

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Respectfully submitted,


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